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Workshop Opening Reception Tuesday, May 26, 7 pm, at Marine Building

Located at 355 Burrard Street, the Marine Building was the tallest building in the British Empire when it was completed in 1930. Since then it has been called one of the world's great masterpieces of Art Deco Architecture. The 25 story building is a marvel with decorative elements in terracotta, steel, brass and marble. It also features unique nautical details, gargoyles, murals and an impressive 40 foot archway entrance into a lobby designed to resemble a Mayan temple.

Conference Opening Reception

Thursday, May 28, 7 pm, at Bill Reid Gallery

The Bill Reid Gallery, located at 639 Hornby Street, promotes the knowledge, understanding and appreciation of contemporary Aboriginal arts of the Northwest Coast of America. Home of the Bill Reid Foundation collection, the gallery exhibits important works by Bill Reid, and other contemporary masters such as Jim Hart, Robert Davidson, and Don Yeomans.

Conference 2009 Banquet:

Saturday, May 30, 7 pm, at Floata Seafood Restaurant

The 2009 CAC Conference Banquet will be held at Floata Seafood Restaurant located at 400-180 Keefer Street in the heart of Chinatown. The Vancouver branch of the Hong Kong based Floata Restaurant group is the largest Chinese Restaurant in Canada. This 1000-seat restaurant offers an authentic Hong Kong experience and specializes in Cantonese style cuisine with an emphasis on seafood.

Workshop I

Digital Documentation for Conservators

2-day Workshop. Wednesday and Thursday May 27-28, 2009 Location: The Vancouver Art Gallery, 750 Hornby St., Vancouver

As conservation professionals continue to integrate digital technology into their procedures for examination, investigation, treatment and reporting, it is necessary to understand the principles guiding reliable digital image capture, processing, use and preservation. Workshop participants will learn the fundamentals of Digital Image Documentation for 2-D and 3-D objects in the context of conservation activities. Key issues to be discussed are: workflow, equipment, studio set-up and imaging software. Conservators will learn the best standards for how to create accurate digital images, produce reliable presentation materials, and protect the integrity of their digital files for the long term.

Instructor: Jessica Bushey

Jessica Bushey holds a Masters in Archival Studies from the University of British Columbia. She is currently the Head of Digitization at the Museum of Anthropology, a partner in CaJe Creative Group, a photography and design studio based in Vancouver, and an instructor in the Continuing Studies Department at Emily Carr University of Art & Design. Her research interests focus on born-digital images as reliable and authentic records.

Workshop II

Making Museum Mounts

1-day workshop offered twice.Session 1: Wednesday May 27, 2009Session 2: Thursday May 28, 2009

Location: UBC Museum of Anthropology, 6393 N.W. Marine Dr., Vancouver

The design segment of the workshop will utilize a selection of artefacts and objects which require display mounts. There will also be samples of display and visible storage mounts from the UBC Museum of Anthropology for review and discussions. The participants will workshop their own design solutions guided by the overriding principles of: zero impact, stability and simplicity. Techniques of measuring, patterning and artefact handling for mounting will be practiced.

The mount fabrication component will include demonstrations and hands on practice in

- mild steel manipulation and gas welding
- brass manipulation and silver soldering
- spring steel manipulation and silver soldering
- acrylic and other polymer manipulation and finishing techniques

By the end of the day each participant is expected to have completed a generic mount where they have used as many of the learned techniques from the day as possible.

Instructor: Carl Schlichting

Carl Schlichting has practiced ethnological, historical and industrial collections conservation for 20 years across Canada. For the past ten years he has freelanced as a mount maker for art and artefacts.

Carl's practice includes his involvement in the development of mount making training and publications for CCI. He has 3-4 craftspeople trained to assist him in the various projects underway and completed. His best teacher has been the think-on-the-run demands of high-pressure exhibit deadlines.

Workshop III

The Natural Dye Workshop

2-day workshop. Monday and Tuesday, June 1 and 2, 2009 Location: Maiwa East, 1310 Odlum Drive, Vancouver

Charllotte Kwon's passionate study of natural dyeing techniques has led her to visit and work with cultures around the world. In this workshop she shares her vast knowledge of natural dye history and use. In addition Charllotte offers insight into her own in-studio processes and demonstrates how to get the most from a range of dyes and fabrics. The student will obtain a good technical understanding of the mordanting processes and the varied uses of ancient natural dyes (indigo, cochineal, madder, fustic, and many others). Gorgeous Turkey reds, indigo blues, and Indian yellows are just a few of the colours achieved as students work on cotton, silks, wools, and linen. The full spectrum of more than 60 rich earth colours dyed in class will form a source book for each student. These source books are a great inspiration and reference for years to come. Students will also complete several natural dye projects.

Instructor: Charllotte Kwon

Charllotte Kwon is the owner of Maiwa Handprints Ltd., Director of the Maiwa Foundation, author, and documentary filmmaker. A highly energized and dynamic presence, Charllotte travels to India three times each year with additional trips to other countries to supplement her ongoing natural dye and textile research.

Friday May 29,	2009			
8:30	Registration			
9:00 – 5:30	Trade Fair			
Sustainability in Conservation Session: Chair: Elisabeth Czerwinski				
9:00 – 9:30	Eve Graves			
	Waste Not, Want Not. Sustainability - From Political Mantra to Way of Life			
9:30 – 10:00	Gholamreza Vatankhah* and Mehdi Razani			
	Evaluating Sustainability in Historic Buildings: Reusability of 4 Historic			
	Buildings in Isfahan/Iran			
10:00 – 10:30	Joanna McMann			
	LEEDing the Way			
10:30 – 11:00	BREAK Sponsored by "Fine Science Tools"			
	Face of Conservation Session: Chair: Marianne Webb			
11:00 – 11:30	Heather Richardson			
	The Changing Face of Conservation and the Pitt Rivers Museum			
11:30 – 12:00	Sue Bigelow			
	Digitizing Audio Tapes at the City of Vancouver Archives			
12:00 – 12:30	Dee Stubbs-Lee			
	Inside Out: A Conservator's Investigation of Museums, Visible Storage, and the			
	Interpretation of Conservation			
12:30 – 2:00	LUNCH			
Per Guldbeck L	actura			
	Andrea Sanborn			
2:00 – 3:00	Andrea Sanborn			
Care of First Na	ations Belongings Session: Chair: Kasey Brewer			
3:00 – 3:30	Tara Grant			
	Conservation of Thule Skin Clothing from the Sannirajaq Site, Nunavut			
3:30 – 4:00	Anne MacKay			
	A Study of an Early Iroquois Headdress			
4:00 – 4:30	BREAK Sponsored by "City of Vancouver Archives"			
4:30 – 5:00	Sarah McNett *and Susan Heald			
	Community Consultation and Conservation Treatment for an Eighteenth			
	Century Great Lakes Native American Collection			

5:00 – 5:30David Grattan* and Jeanne InchLessons Learned at the Symposium: Preserving Aboriginal Heritage

Saturday May 3	30, 2009		
8:30	Registration and Posters		
9:00 – 3:30	Trade Fair		
8:30 – 3:15	Silent Auction		
Research Sess	sion:	Chair: Heather Dumka	
9:00 – 9:30	Clare Lewarne		
	A Protocol for the Identification of R	ayon in 1920s and 1930s Dresses	
9:30 – 10:00	Azadeh Samii* and Maryam Bromand		
	Analysis and identification of the da	maged parts of the Ibis Statuette	
10:00 – 10:30	Michael Harrington		
	Asking the Question: What Material	s Can I Use With Source Capture Devices?	
10:30 – 11:00	BREAK Sponsored by "Hos	kin Scientific"	
11:00 –11:30	Poster Session:	Chair: Carol Brynjolfson	
11:30-12:00	Exhibit, Vancouver Art Gallery	,	
	Vermeer, Rembrandt and the Gold	en Age of Dutch Art Masterpieces from The	
	Rijksmuseum		
12:00-1:30	LUNCH (CAPC Meeting at V	AG Room 302)	
Process and P	ractice Session:	Chair: Lisa Bengston	
1:30 – 2:00	Renée Dancause*, Jan Vuori and J	anet Wagner	
	How Suite it is-Consultation, Collaboration and Communication in the		
	Treatment of Egyptian Revival Furn	iture	
2:00 – 2:30	Valery Monahan		
	Stolen, Returned, Conserved, Reve	aled: The Adventures of Yukon Seasons	
2:30 – 3:00	Laszlo Cser		
	Reflections on the Primacy of	the Authenticity in Connoisseurship and	
	Conservation		
3:00 – 3:30	BREAK		
3:15	Silent Auction ends		
3:30 - 5:00	CAC ANNUAL GENERAL MEE	TING	
7:00-10:00	BANQUET (Floata Seafood Res	staurant- 400-180 Keefer Street)	

8:30 Registration

Treatment Ses	sion: Chair: Sarah Spafford-Ricci			
9:00 – 9:30	Tony Rajer *and John Maizels			
	Visionary Art Environments and Their Preservation: A Case Study of Nek			
	Chand's Garden in Chandigarh, India			
9:30 – 10:00	Marie-Catherine Cyr* and Wendy Baker			
	BEVA D8 Dispersion Meets Quick-set Epoxy on Plywood: Notes on Materials,			
	Technique and Treatment of a Painting by Québécois Artist Marcelle Ferron			
10:00 – 10:30	Patricia Bufe			
	The Conservation Treatment of an Eighteenth-century Chalk Portrait or The			
	Evolution of a Treatment Guided by the Artefact			
10:30 – 11:00	BREAK Sponsored by "Pacific Art Services Ltd."			
Surveys Session: Chair: Jane Hutchins				
11:00 - 11:30	Heather Dumka			
	"A STAR Act": A Condition Survey at the Glenbow Museum, Using the			
	STARMuseum Collection Management System			
11:30 – 12:00	Sarah Spafford-Ricci and Tara Fraser*			
	Stepping Back to Look More Closely: Two Decades of Conservation			
	Assessment of Museums			
12:00 – 1:30	LUNCH (CAC Regional Representatives Meeting at VAG Room 302)			
Care and Treat	ment of Totem Poles Session: Chair: Betty Walsh			
1:30 – 2:00	Rick Lair and James Hay*			
	Preserving the Jasper Totem, A Case Study: Finding the Balance			
2:00 – 2:30	David Grattan* and Andrew Todd			
	The Potential of the IML Resistograph for Measuring the Condition of Large			
	Wooden Objects			
2:30 – 3:00	Nadine Power* and Andrew Todd			
	Playground of the Gods: A Totem Pole Conservation Project			

Closing Announcements

9:00-9:30 AM

Waste not, want not. *Sustainability* - from political mantra to way of life *Eve Graves, University of the Arts, London, UK*

Sustainability and access have become buzz words for a politically aware conservation profession. They are inextricably linked. How can the possession of public collections be justified if they are not accessible? How can collections become and remain accessible if they are not cared for? But how can they continue to be cared for when climate change and global conflicts threaten their material and cultural stability? Cultural tourism brings a large income to the UK yet government investment for sustaining monuments and collections on which this tourism is based is, in comparison, negligible. Some important conservation education programmes are threatened with closure compromising the future of the profession in Britain and elsewhere. It has never been more important, therefore, to accept that we are all responsible for our world, its climate, its peoples, its landscapes, its buildings and its collections. What is needed is a new approach that must begin in childhood and continue throughout life. The conservation profession can play a major role in this if it chooses to do so. One of the wonderful things about conservation is that it links so many different disciplines, professions and peoples. It draws on arts, sciences, crafts and traditions. It requires many skills in communication, cooperation, problem solving and creative, innovative thinking. Rather than lament the ever-growing list of skills and bodies of knowledge demanded of the conservator, should we not rather celebrate the richness of out profession and its potential for educating the public and thereby influencing the political agenda.

At Camberwell the new undergraduate programme has sustainability at its heart. We hope that as our students learn from their first day to think of the conservation of collections in the context of the future of the planet, they will make the link between the housekeeping policies of the studios, the waste-not, want-not approach to the use of materials, and their own position in society, where we all have a role to play in conserving energy and minimising our destructive impact on our world.

Camberwell is encouraging a realistic approach to conservation in the contemporary world. While continuing to teach the essential craft skills so that they are not lost and are available whenever and wherever resources allow their use, we are focussing on developing innovative approaches to preservation challenges and an enthusiasm for extending understanding of conservation outside the profession.

Our learning strategies include compiling individual sample books where students research the materials they use and seek alternatives available in other trades and professions

like medicine, construction and the food industry to benefit from a wider range of research. We encourage students to look for low tech solutions to preservation challenges and to investigate traditional methods practiced before the appearance of specialist companies supplying conservation tools and materials. Above all, we ensure that all students develop the skills and have the opportunities to communicate the values of their profession to the wider community and to raise awareness of everyone's responsibility to respect our natural & cultural environment.

9:30-10:00 AM

Evaluating Sustainability in Historic Buildings;

Reusability of 4 Historic Buildings in Isfahan/Iran

Gholamreza Vatankhah* and Mehdi Razani, Art University of Isfahan, Iran

Changing historic buildings to accommodate a new, compatible use is one of the most important conservation methods for architectural heritage. This is especially important to consider in developing countries like Iran and India which have many cultural historic buildings that have lost their primary applications due to various reasons. Rejuvenation of these monuments for suitable new applications will preserve them well and save a lot of economic resources. Moreover, it could be thought of as a preservation treatment in which all developmental basics, cultural developments, and modernization are considered. While preserving originality, it provides a good future for the buildings which is considered a primary goal for sustainable conservation of cultural heritage. In creating new uses for historic buildings, one has to consider parameters such as materials and structural values, cultural values, applied values and even emotional values. In this article, all these parameters are investigated for 4 buildings in Isfahan including Tohidkhaneh, Vasiri's Public Bath, David's House and Sukias's House in Isfahan. Restoration treatments are compared and analyzed with a focus on sustainable conservation considerations.

10:00-10:30 AM

LEEDing the Way

Joanna P. McMann, Winnipeg MB, Canada

It is no small undertaking, when embarking on the construction of a new building, to properly store and preserve collections, support the business programming needs of staff, and facilitate the activities of clients. Add to the challenge the current need to be environmentally responsible and the task may seem impossible. Competing needs often have to be weighed against each other, compromises have to be made as obstacles are encountered along the way, and decisions have to be reached with a myriad of partners while ensuring stringent guidelines are being adhered to while racing against a ticking clock.

While not a "how-to" manual on the construction of a sustainable building, this paper will explore some of the considerations, lessons learned, and challenges overcome in the construction of a LEED-certified cultural resource facility from the ground up.

11:00-11:30 AM

The changing face of conservation and the Pitt Rivers Museum

Heather Richardson, Pitt Rivers Museum, Oxford, UK

The Pitt Rivers Museum, University of Oxford, is a museum of Anthropology and World Archaeology. Founded in 1884 with part of the personal collection of Augustus Henry Lane Fox Pitt Rivers, the 20,000-strong founding collection has now grown to more than 500,000 artefacts, photographs and manuscripts. The first impression for many visitors is that this is a museum of Victorian anthropology surviving to the present day. When the writer Bill Bryson visited the museum in 1998 he concluded that it was "very agreeable" in its "quaint 1870s sort of way".

In the early years of the Museum the collections were commonly used as part of teaching practice, the museum being the sole home for teaching social anthropology at the University until 1914. The early curators of the museum studied the objects collected through drawing, making replicas and analysing the methods of manufacture. They believed that "objects helped to show a history not just of technology and artistry but of human thought and knowledge through all its slow stages of growth and development" (Gosden & Larson 2007). For the museum, material culture was key to the study of people and places. However, developments within social anthropology marginalized the museum in scholarly circles after the 1930s.

This shift in the use of the collections and the emergence of new museological practice, where physical interaction with objects was limited to few museum staff, will have accentuated the notion of the Museum being frozen in aspic. In recent years, however, largely due to funding implications across the UK museum sector and a new wave of anthropological thought, access—to the local public and to source communities—has become key to the workings of the Museum.

What does all this have to do with conservation?

In the early years, curators and technicians prepared artefacts for display until the conservation department was born in the early 1970's. As this new profession emerged, so the ethical framework that we all now practice developed. Conservation equated to benchwork and then progressed to ideals of minimum intervention and preventive conservation. More recently, the Conservation department has played a key role in preparing and interpreting objects for various forms of access by First Nations source communities. As the conservation department has changed with the Museum, how will the role of the conservators in the future adapt to current thinking and so remain a sustainable entity in the modern museum? This paper will consider recent and future projects with First Nations groups to highlight these ideas.

2009 is the 125th anniversary of the founding of the Pitt Rivers Museum and therefore a good point to mark the changes that have taken place over those years.

11:30-12:00 AM

Digitizing Audio Tapes at the City of Vancouver Archives

Sue Bigelow, City of Vancouver Archives, Vancouver, BC, Canada

The City of Vancouver Archives has many deteriorating audio tapes in its holdings. They are too fragile to play for researchers, so the audio portion of our historical records has been inaccessible. The current standard for archival preservation of audio is to digitize the contents at a very high bit depth and sample rate and to use procedures which give an authentic transfer. The resulting files need to be stored in a secure digital repository.

Many of the tapes are in such bad condition that they may only have one playing left. Although the original artefact, the tape, is kept after transfer, the main preservation focus is on the creation of the high-quality digital surrogate and the maintenance of that file or files.

In spite of its staff's unfamiliarity with audio materials, the Archives set up a Digital Audio Workstation, had staff trained, and followed current best practices (such as *Sound Directions*) to create digitization procedures and collect necessary metadata.

The basics of audio digitization will be reviewed, and the Archives' implementation will be discussed.

12:00-12:30 AM

Inside Out: A Conservator's Investigation of Museums, Visible Storage, and the Interpretation of Conservation

Dee Stubbs-Lee, New Brunswick Museum, Saint John, NB, Canada

This paper is based on research undertaken toward an MA dissertation in Preventive Conservation, completed by the author in 2008 through Northumbria University's new distance education program.

The author has observed that the role of conservators in museums is typically poorly understood by the general public. This lack of awareness, and resulting insufficient funding, is putting collections in peril. A small but growing number of institutions are now exploring various ways of revealing traditionally "behind-the-scenes" museum functions, such as conservation and collections care, to their visitors. This paper introduces concepts of exhibit, storage, and visible storage, and discusses the conflicts that arise from competing museum mandates of providing maximum collections access versus ensuring long term preservation of those same collections. The experiences of several museums in Canada, the United States, England, and Scotland which currently use visible storage and other means of enabling visitor access "behind-the-scenes" are surveyed and compared. Baseline information gathered from museum personnel representing a number of these institutions (in North America, the UBC Museum of Anthropology in Vancouver, the New York Historical Society and Brooklyn Museum in New York, the Smithsonian American Art Museum and the associated Lunder Conservation Center in Washington, DC; and in the UK, the National Conservation Center in Liverpool, the Museum of Science and Industry in Manchester, and the National Museums Scotland in Edinburgh), by means of a survey questionnaire, interviews, site visits and personal communication, are discussed. The research survey questionnaire probed four key areas: the institutional visible storage history, staff analysis of the advantages and disadvantages of visible storage, means of interpretation of museum conservation, and staff recommendations for improved design. The resulting data is discussed and supplemented with information from the existing literature on visible storage, as well as personal observations by the author. In conclusion, guidelines are recommended for the implementation of visible storage and visible conservation schemes at other museums, based on these research findings.

3:00-3:30 PM

Conservation of Thule Skin Clothing from the Sannirajaq Site, Nunavut

Tara Grant, Canadian Conservation Institute, Ottawa, ON, Canada

Excavations in the summer of 2007, at Sannirajaq (Hall Beach), Nunavut, uncovered a mother-lode of Thule artifacts frozen beneath a thick layer of ice. One important component of this site was the 50 well preserved skin artifacts. Many of the artifacts were largely intact clothing including fur parkas, bird skin inner parkas, gut skin anoraks, fur trousers, boots, mittens, belts and bags. The skin clothing presented the usual conservation problems which occur when treating wet, dirty, fragile, 3-dimensional artifacts. In addition, the skin artifacts presented special conservation problems due to their proximity to several well-preserved burials. The possibility of hazardous biological contamination combined with an extremely bad odour necessitated special safety and cleaning processes.

This paper will present the history, deterioration processes, analysis, safety concerns, conservation and restoration of these garments.

3:30-4:00 PM

A Study of an Early Iroquois Headdress

Anne MacKay, McCord Museum, Montreal, QC, Canada

Historical and archaeological evidence suggest that horned headdresses, symbolic of a chieftain's powers, have been worn in the Eastern Woodlands region for thousands of years. This paper details the results of an examination of a very rare and early (late 18th to early 19th century) Iroquois headdress. The headdress is one of the earliest accessioned objects in the McCord Museum and consists of the entire skin of the head of a deer, including the ears and antlers. Its decoration, while consisting of mostly traditional Aboriginal techniques and materials, also includes some of European origin, and includes feathers, porcupine quills and wool stroud. Various pigments, paints and dyes are present on the headdress as well.

The paper looks at the history and provenance of the headdress. It was acquired by David Ross McCord in 1889 in the belief that it had belonged to the Shawnee Chief Tecumseh. A stylistic comparison between this headdress and others in the Iroquois tradition is made and possible interventions through the years are discussed.

The methods of fabrication of the headdress are described and include: the preparation of the head skin and hide components, the dying of the quills, quillwork methods, which include zigzag straight line and edge quilling, the shaping and decoration of the feathers, and the mounting of the feathers onto the headdress.

The various materials used on the headdress are discussed and the results of the instrumental analysis undertaken by the Canadian Conservation Institute for the identification of materials are presented. Red pigment with different media (oils and resins) is present on the antlers, the skin and the feathers. Red pigments have been rubbed onto the surface of the skin as well. The quills and some of the feathers are dyed. Also present are sinew, thread and cord, which are used both as sewing and fastening materials. At least three different types of feathers are attached to the headdress and options for their identification are discussed.

4:30-5:00 PM

Community Consultation and Treatment for an Eighteenth Century Great Lakes Native American Collection

Sarah McNett and Susan Heald, the National Museum of the American Indian Washington, DC, USA

Conservation and exhibit preparation at the National Museum of the American Indian (NMAI) often includes consultations with representatives of Native communities. In December 2007, the focus of one of these consultations was a group of Native American dress and accessories collected in the Lake Michigan area, between 1792 and 1794 by Andrew Foster, a lieutenant in the British army at Fort Michilimackinac. In an earlier curatorial consultation with Ruth Phillips and Michael Witgen (Ojibwe), a man's shirt, feather bonnet, sash, bands, tobacco pouch, neck pendant, earrings, leggings and moccasins, and an associated shield and pipe stem from the Foster collection were chosen for display in the upcoming exhibit *Infinity of Nations*. At that time, it was suggested that further consultation on whether to undertake polishing of the silver friendship brooches pinned to the shirt and feather bonnet, and Dr. Anton Treuer (Leech Lake band of Ojibwe), a professor of Ojibwe language, was recommended as a cultural expert.

The conservation consultation with Dr. Treuer and Cecile Ganteaume (NMAI Curator) addressed questions including how the objects would be displayed and what conservation treatment was appropriate for their cultural context. Discussion also considered for whom these objects were actually made, how they were acquired by Foster and whether they were meant to be worn together as an outfit. Dr. Treuer shared his extensive insights on historical context, materials and design, which led to discussion of how these objects were intended to look. For example, he explained the medicinal protective properties of the bird skin and vegetal fibers attached to the shield and the necessity of the shield cover in concealing and protecting these pieces. The objects were placed on a mannequin to assess display options and it became clear that they were coordinated in color scheme and design elements. This also led to a decision to display the legbands as armbands.

In the months following the consultation, the objects were treated using the information collected during the consultation to inform treatment decisions. The treatments required careful evaluation of materials and methods which could be adjusted to the particular needs of the objects. A main focus was the treatment of the silver friendship brooches pinned through the textile elements of both the shirt and the feather bonnet. The brooches were tarnished in part because of the presence of sulfur based dyes in the textiles. The brooches were polished to restore the contrast between the silver and the dark fabric. Other significant treatment included

contact cleaning of the sash as well as in-filling areas of loss with replacement yarns following the original weaving structure in the finger woven sash and armbands.

This paper will evaluate in detail the conservation consultation, what was learned and how it influenced treatment. Specific treatment steps will be described. The paper will illustrate how the consultation, by providing so much information about the context, history, materials and significance of the objects that otherwise would be difficult to gather led to a more informed treatment and display strategy.

5:00-5:30 PM

Lessons Learned at the Symposium: Preserving Aboriginal Heritage

David Grattan* and Jeanne Inch, Canadian Conservation Institute, Ottawa, ON, Canada

In September 2007, CCI held a very successful week-long Symposium on the preservation of Aboriginal Heritage. The symposium brought together a number of aboriginal people from North America and elsewhere as well as conservators and conservation scientists. (The postprints have recently been published and are available from CCI). The overriding reason for the success of the meeting was the sense among the aboriginal participants that their views had been respected and taken seriously: they had been listened to. This was strongly due to the fact that the Symposium had been guided at every stage of development by an Advisory Committee with representation from many diverse areas of Canada—including representatives from the Algonquin community in the Ottawa region. In this context CCI was particularly grateful to Peter Decontie of that community, who provided wisdom and guidance and acted as elder for all meetings of the group.

This presentation examines the results of CCI's 2007 Symposium through three main themes:

The first of these themes is that of Diversity and its impact on heritage conservation. In recent years the structure of society has changed radically and this is affecting our approach to many things including heritage conservation. There is an increasing desire on the part of indigenous communities to recapture their heritage and this is seen in the desire of aboriginal communities to assume responsibility for the custody and care of their own collections.

The second theme is the examination of tensions between the science-based approach to conservation and the aboriginal approach which centres around the intangible values surrounding objects. The presentation discusses how these different approaches can be beneficially brought together. While there are grounds for conflict there are also stronger reasons to collaborate and use one sort of knowledge to support another.

The third theme of the talk is to examine the potential for collaboration between the conservation and aboriginal communities in Canada.

It is clearly in the interests of everyone that the valuable and unique characteristics of indigenous cultures in Canada be preserved for future generations.

9:00-9:30 AM

A Protocol for the Identification of Rayon in 1920s and 1930s Dresses

Clare Lewarne* and Irene Karsten, Toronto ON, Canada

The use of rayon in 1920s and 1930s garments confronts conservators with new challenges. Historic literature clearly documents problems with tenacity, wet strength, dimensional stability, and dye fastness for early rayon-factors that may complicate storage, treatment and display of rayon textiles. Moreover, rayon and other cellulosic textiles are expected to degrade similarly; however, due to its more amorphous structure rayon is at risk of doing so at a faster rate. A first step in preserving early rayon textiles is correct identification. Unlike natural fibres, rayon cannot be definitively identified with basic microscopy alone. The purpose of this research was to develop and test a protocol for the identification of viscose and cuprammonium rayon. A sample was drawn from the Human Ecology Clothing and Textile Collection at the University of Alberta, consisting of women's dresses dating from the 1920s and 1930s. Dresses from which fibre samples could safely be removed and for which the database indicated a fibre content of 'rayon', 'acetate', 'synthetic', 'nylon' or no fibre content entry at all were selected for analysis. Polarizing microscopy, hot-stage microscopy, digital microscopy and the use of high dispersion refractive index oils and the Becke Line Method were explored as possible fibre identification techniques. These techniques were chosen as alternatives to chemical solubility testing in an attempt to decrease the use of solvents that can be both dangerous for the conservator and environmentally problematic to dispose of. Digital microscopy was explored as a sustainable method of fibre identification in so far as magnified digital images can be captured and preserved with artifact documentation, thus eliminating the need for performing multiple fibre identifications over time. Preliminary results indicate that a combination of polarized light microscopy and hot-stage microscopy are most effective and efficient for the identification of rayon; however, the relative merits of all techniques will be evaluated and discussed not only in terms of effectiveness of identification, but also in terms of expense, sample preservation and ease of execution.

9:30-10:00 AM

Analysis and identification of the damaged parts of the Ibis Statuette

Azadeh Samii*, Billancourt, France and Maryam Bromand, Wien, Austria

Introduction

In most cases, classification is carried out in keeping with subjective values. Classification according to the nature of cultural and historic artwork, as well as according to the materials of which a work is composed, contradicts the objective reality of the artefacts discovered during archaeological digs. On one hand, there are very few studies and analyses carried out on composite objects in Iran despite the number of digs undertaken. On the other hand, this type of study requires enormous energy on the part of the staff in charge of the preservation and conservation of objects. No in-depth study has ever been conducted on objects that originate in countries other than Iran and that are housed in Iranian museums. This is precisely the issue that attracted our attention, and that inspired us to carry out the study and analysis of one such object. The object is a one-of-a-kind Egyptian statuette.

Presentation of the statuette

This type of object, a statuette shaped like an ibis, symbolizing the god Thoth, is found only in Egypt. The head and feet of this statuette are made of bronze and the body is made of wood. It dates back to the year 600 B.C. and is currently housed at the Niavaran Palace Museum in Tehran.

Treatment of the metal part of the statuette

Considering the results of the analyses carried out, we could not use chemical or electrochemical methods to treat the metal parts of the object. These two methods require that the object be immersed in a solution, which might cause undesirable reactions. Of course, in order to treat the statuette's bronze disease, we could locally use chemical methods and corrosion inhibitors such as benzoates or azole compounds and on a 1- to 2-mm surface. However, the best method proposed to treat the metal areas of the object was a local mechanical cleaning followed by the application of a stabilizer such as an acrylic resin.

Treatment of the wooden parts of the statuette

The statuette is a composite object requiring a specific conservation treatment. As such, the wood needs to be first cleaned mechanically and the dirt removed. We must also consider the possibility that the wood might have had a decorative layer (red stain) that must be protected. The use of a stabilizer could prove to be effective.

10:00-10:30AM

Asking the Question: What Materials Can I Use With Source Capture Devices?

Michael Harrington^{*}, Canadian Conservation Institute, Ottawa, ON, Canada and Marilyn Eaman, Certified Industrial Hygienist, EnvirOHealth Solutions (Ottawa) Inc

Upon completion of the massive remediation and laboratory systems upgrading and rehabilitation project conducted at the Canadian Conservation Institute, one question remained to be answered: Did the source capture devices, flexible arms and slot hoods, installed throughout the laboratories, deliver the protection that we needed to work safely?

Flexible extraction devices are used in conservation all over the world. They are referred to as elephant trunks, or by the name of the manufacturer of the part of the system that we see in the lab spaces. Typically they are used to pick up solvent fumes from cleaning, consolidation and finish removal operations in cases where fume hoods are either too small or impractical. At CCI, we have also installed a number of slot extraction hoods, following pioneering work done at the Parks Canada Ontario Service Centre in Ottawa. These have proven very versatile at capturing fumes for some specific operations.

Fume hoods offer something referred to as containment. That means that the entire object and the materials used in these specialized cabinets are contained within the cabinet. There are very well established, continually upgraded testing parameters for these devices. If tested carefully to the most current standards, you can make sound assumptions about the level of protection delivered by these devices. No equivalent standards exist for the flexible arms and slots, but we were about to ask the question most practitioners were afraid to ask. How effective are these devices in our specific operation? What is the appropriate level of hazard, as expressed by the Threshold Limit Value (Occupational Exposure Limit) TLV (OEL) of the solvents and chemicals that we want to work with, that can be safely accommodated with these devices in our specific laboratory situation?

After consulting expertise across North America, we worked with a very experienced Industrial Hygienist to examine our question, develop an appropriate testing protocol, design a training program on the correct usage of these devices and deliver this training to all laboratory staff and interns at CCI. This work has allowed us to describe a general usage guideline based on the TLV (OEL) of materials in common usage as well as a review procedure for new chemicals

and mixtures that is followed before any new products are used with the flexible arms and slot extraction hoods in the CCI facility.

This presentation will be of direct interest to any conservator who works with hazardous materials in a laboratory setting. It will offer a basic description of how extraction systems are designed to work, will detail the specific nature of the CCI installation and will give guidance on the assessment of worker exposure as it relates to flexible extraction devices. It will describe our training process and the decision tree that we use to review the use of new chemicals with these devices. It will offer links to the appropriate codes and design resources that will assist in developing safer workplaces for others.

1:30-2:00 PM

How Suite it is – Consultation, Collaboration and Communication in the Treatment of Egyptian Revival Furniture

Renée Dancause*, Jan Vuori, and Janet Wagner, CCI, Ottawa, ON, Canada

Collaboration with experts in different fields of museology and conservation can be a key element in determining the course of treatment for complex objects. Several examples where outside consultation was a step in the treatment process of a rare suite of Egyptian Revival Furniture will be illustrated.

The suite of Egyptian Revival furniture, made up of a settee, chair and stool, belongs to Fulford Place, a historic house museum in Brockville, Ontario. Dating from the 1800s, the upholstery consists of red wool fabric with cotton appliqués depicting Egyptian style figures and motifs. The cover fabric of the settee was the most problematic, having disfiguring stains and concretions that prevented it from being exhibited. The furniture is unique in that it retains its original upholstery and has never been restored. The condition of the suite along with its three-dimensional nature posed a number of treatment challenges that led us to pursue various means of consultation.

Consultations with various specialists thus began long before the conservation treatment was started. For instance, in the examination phase, curatorial input was provided by an expert who had dealt with Egyptian Revival furniture and objects for a past exhibit, and who determined the significance of the ensemble of the three pieces of furniture as well as the rarity of the intact show covers and spring support systems. Our second example was an interactive poster, both hard copy and a web based version with take-away questionnaire, which was presented at an overseas upholstery conference with the aim of garnering specialist audience input. Conservators in attendance were asked a series of questions with defined choices to provide responses regarding the optimal degree of intervention in the conservator was consulted at the outset of the project for advice and also provided in-house under-upholstery expertise during the treatment. Lastly, keeping the lines of communication open with the owners of the objects has been helpful all along in keeping the parties involved informed of possible and expected treatment outcomes.

The suite of Egyptian Revival furniture presented an ideal situation for consultation with a variety of specialists who contributed to the decision making process. The multi-disciplinary collaboration proved to be extremely beneficial to the final outcome of the treatment.

2:00-2:30 PM

Stolen, Returned, Conserved, Revealed: The Adventures of Yukon Seasons Valery Monahan, Government of Yukon, YT, Canada

On September 15th, 2007 thieves broke into the Canada Games Centre in Whitehorse, Yukon, Canada, smashed an exhibit case and stole Shane Wilson's sculpture, *Yukon Seasons*. Completed in 2003, *Yukon Seasons* is Wilson's largest work to date. It was commissioned by an Italian businessman, took three years to carve and was donated to the Yukon Public Art Collection by the artist when the original commission was cancelled. The sculpture was created from the upper jaw and skull of a bull moose with complete, attached, antler rack. The bone and antler are elaborately carved with geometric shapes and scenes from nature. Large, fragile and unique, *Yukon Seasons* soon became famous as media reports of its theft spread across Canada. In January 2008, it was registered with Art Loss International, on the chance that it had been smuggled out of the Yukon to be sold.

On April 8th, 2008, the Whitehorse detachment of the Royal Canadian Mounted Police received an anonymous tip leading them to the sculpture. The RCMP returned the work to the Government of Yukon Arts Branch that week and it arrived in the Government of Yukon Museums Unit Conservation laboratory in early July. On December 2, 2008 there was a public unveiling of the treated sculpture in its original display location at the Winter Games Centre.

This presentation will describe the conservation work done to assess, clean and repair *Yukon Seasons* and to modify the artist's original mount in preparation for the sculpture's return to long-term display. Public attention remained high during treatment, with media reporting from the conservation lab as the artist had his first look at the returned (damaged) work and the conservator providing updates on its "restoration" on the local CBC Radio morning show. Sculptor Shane Wilson was involved in and extremely supportive of every aspect of the conservation work. Information on his techniques for processing and carving skeletal material provided useful context for understanding the sculpture's condition. His opinions on an appropriate final appearance for the sculpture guided treatment choices for stain removal and repair work.

2:30-3:00 PM

Reflections on the Primacy of the Authenticity in Connoisseurship and Conservation

Laszlo Cser, Toronto, ON, Canada

"In 2002 Canadian businessman Ken Thomson set in motion one of the most significant acts of philanthropy in Canadian history when he agreed to donate his priceless art collection to the Art Gallery of Ontario in Toronto. The Collection of over 2,000 Canadian and European paintings and objects will be housed in a series of magnificent galleries in a transformed AGO designed by the world-renowned architect, Frank Gehry." ©The Thomson Collection 2008

Since meeting this remarkable man, Ken Thomson, in 1983, I could not have anticipated the depth of his influence, personally or professionally. His private world as an art collector nurtured a love of beauty that has now been presented to the world as The Thomson Collection, an expression of beauty entrained by his humility, gentleness, and capacity for understanding the human spirit.

Over the course of 16 months during 2007 and 2008, over 700 works of art, mostly Canadian paintings, were examined and treated in preparation for The Thomson Galleries at the Art Gallery of Ontario. David Thomson, his son, envisioned and directed innovations in framing and installations that are revolutionary in their presentation of Canadian Art. During these months of intense focus, much time was spent in solitude at the bench reviewing the dynamic and interactive relationship between connoisseurship and conservation, but always present with the memory of a great Canadian, and arguably one of the greatest collectors of the 20th century. The many conversations and observations with Ken Thomson, and subsequent internal dialogues, became an exploration of what locates us as conservators in the landscape of aesthetics and historicity. Alongside the ethical reckonings of diagnoses are the implications of treatment interventions. As the primacy of the image gives value to the immediacy and meaning of the aesthetic experience, so does authenticity give value and meaning to the deliberations of historical materiality and contextual relationships. Is there an altar of sacrifice if faced with choosing one over the other?

In any given situation, whether one sides for the primacy of the image or authenticity, or settles in the space between, the decisions taken become a testament of the relationship between the collector and the conservator. The Thomson Project will be outlined from inception to completion during the course of the presentation, with highlights, background notes and examples.

9:00-9:30AM

Visionary Art Environments and their Preservation:

A Case Study of Nek Chand's Rock Garden in Chandigarh, India.

Tony Rajer *and John Maizels, Nek Chand Foundation, Madison, WI, USA

Self-taught folk art environments pose special challenges regarding their preservation. Often made of inexpensive materials recycled from other industrial sites, the environments easily decay and die. This is not the case with Nek Chand's Rock Garden, located in Chandigarh, India. The 25-acre park has nearly 3,000 sculptures made of cement, tiles, glass and stone. Constructed over a 45-year period, and opened as a public park in 1976, the garden receives nearly 4,000 visitors per day making it the most-visited folk art environment in the world, as well as the largest.

Maintaining the park and documenting the growth of this extraordinary vision is the intent of the Nek Chand Foundation. Over a 10-year period nearly 100 volunteers from diverse backgrounds, including conservators, have been sent to India to work with Nek Chand (b.1924) to document the garden, help conserve it, and enlarge it. This presentation draws upon the rich body of documentary material and highlights the accomplishments and failures of the effort to preserve what many scholars call the "self-taught Taj Mahal of India". The talk is fully illustrated.

9:30-10:00AM

BEVA D8 Dispersion Meets Quick-set Epoxy on Plywood: Notes on Materials, Technique and Treatment of a Painting by Québécois Artist Marcelle Ferron

Marie-Catherine Cyr* and Wendy Baker, Canadian Conservation Institute, Ottawa, ON, Canada

In October of 2007 a small abstract painting, *Untitled* (1955) by Québécois artist Marcelle Ferron (1924-2001), was brought to the Canadian Conservation Institute for treatment. Marcelle Ferron is perhaps best known for her involvement with the Automatiste group in 1940-50s Montreal and for her large-scale oil paintings and architectural work with stained glass. *Untitled* (1955) is an example of her early production in Paris (1953-1966), a very prolific time during which she defined her style and solidified her status as an international artist. This painting, an oil on linen canvas marouflaged onto a plywood support by the artist, is a rare remaining example of this practice by Ferron.

The preliminary research into the history of the painting revealed interesting details about the artist's working methods, including techniques, choice, preparation and use of materials. Further investigation and discussion with conservators, curators and the artist's daughter provided insight into a body of work which is minimally documented in the conservation literature. Some of these findings are discussed as part of this presentation, in addition to some of the artist's views on art, artists, and her own work, focusing specifically on her Paris Period production.

Untitled (1955) shows thick layers of oil paint applied to the canvas, wet on wet and wet on dry, using both palette knife and brush. The artist adhered the painting to a plywood board part way through the painting process using quick-set epoxy. Extensive delamination between the canvas and the board, on approximately 50% of the total surface area, had prompted the client to seek treatment for this work. Some of the delaminations were highly visible as hard, domeshaped distortions while others were only detectable through light tapping of the painted surface. In order to preserve the artist's intent, her materials as well as her typical surface repairs and repaints, the preferred treatment procedure was to retain all original elements, and to introduce conservation materials through the plywood rather than removing this secondary support or injecting through largely intact paint layers. Deformations to the canvas were reduced or eliminated by a series of moisture/heat treatments to the painted surface, the heat supplied by an infrared lamp. The canvas was then re-adhered to the plywood using BEVA D8 dispersion injected via small holes drilled through the back of the plywood board. The location of these holes was mapped to coincide exactly with the areas of delamination. A light-weight handling frame was designed to stabilize the painting through its necessary manipulations as well as to provide elevation from the work surface. To complete the treatment, a visually disruptive yellowed coating was removed using solvent gels.

10:00-10:30AM

The Conservation Treatment of an Eighteenth-century Chalk Portrait or the Evolution of a Treatment Guided by the Artefact

Patricia Bufe, Library and Archives Canada, Gatineau, QC, Canada

In 1788, Ursule Boze, a young artist—only 16 at the time—painted a portrait of Jean-Daniel Dumas, a French captain who played a major role in Canada's history. She based the work on an original portrait painted by her father, Joseph Boze, a renowned French portraitist and pastel artist. The work was created using black and white chalk on blue-toned paper that was marouflaged to a canvas and mounted on a stretcher. Additional strips of paper, featuring inscriptions in ink, frame the portrait.

The work arrived in its original frame. It had suffered various degradations due to poor storage and nearly non-existent protection in the back. Damage included a major accumulation of dust on each support element, numerous lacunae at the edges of the paper and on the image caused by insects, a pronounced yellowing of the paper due to light exposure, and damage to the paper, which had become fragile in many areas, caused by the rusted nails that served to hold the canvas on the stretcher.

Acquired by the Portrait Gallery of Canada / Library and Archives Canada in the spring of 2008, the work posed a number of challenges with regard to treatment choices and the degree of intervention due to its varying media and their interrelation, the particular nature of its construction, its fragility (the medium is not fixed) and its state of degradation. We began with an assessment and a treatment proposal focused on not physically separating the support layers (canvas, paper and stretcher), and our choices evolved gradually, guided by the work itself. Certain treatments were abandoned, others were modified over time in keeping with the information the portrait revealed to us and the things it allowed us to do.

This talk will present the conservation treatment of this portrait and shed light on the difficulties of undertaking conservation work on a composite work while respecting its material and technical authenticity.

11:00-11:30AM

"A STAR Act": A Condition Survey at the Glenbow Museum Using the STARMuseums Collections Management System

Heather Dumka, Glenbow Museum, Calgary, AB, Canada and

This paper will discuss a collections condition survey project that was recently carried out at the Glenbow Museum. Due to an active program of exhibits and loans, and a relatively small conservation staff, there had never been a systematic condition survey done at the museum previously. Last year, however, a change in focus to art-centred exhibits gave the Object Conservator a window of opportunity to survey a part of the collection. This was prompted by a management request for an estimate of the "percentage of the collection needing treatment" in order make a better case for funding collections care and conservation.

Since the main objective was to gain an overall view of the condition of the collection, rather than an item-by-item survey, it was hoped that a sample of the collection could provide the needed information relatively quickly. The timeline for the project was quite short, and the budget was non-existent except for the Object Conservator's time. Because of these limitations, two separate surveys were envisioned: an initial survey of the Indigenous Studies collection. This present project only deals with the survey of the Indigenous Studies collection. The initial survey was further limited to those objects in storage which could be easily managed by one person. This eliminated the oversize objects and rolled textiles, as well as those on exhibit.

Conservation staffs have been using the Glenbow's collections management system, STARMuseums, since 2005, and an additional goal of the project was to test the use of STAR for conservation surveys. This would allow the survey data to be directly linked to the collection and conservation records of the museum. The Object Conservator worked with the database administrator to create a survey form in STAR that could be quickly filled out for this specific project. A free-text field was also included so that the form could be used for more in-depth surveys in the future. A small pilot survey was done in the African collection to refine the chosen data fields and define the standards. Various sampling methods were explored in consultation with a statistician, but ultimately it was decided to generate a random sample from a list of the collection artefacts in STAR. The sample was then flagged in STAR and ordered by location for surveying. A total of 1014 artefacts were surveyed, and the results will be discussed along with some of the problems and unexpected benefits encountered during the project.

11:30-12:00PM

Stepping Back to Look More Closely: Two Decades of Conservation Assessment of Museums

Sarah Spafford-Ricci and Tara L. Fraser*, FSR Art & Archival Conservation Inc. South Surrey, BC, Canada

Principal conservators at Fraser Spafford Ricci Art & Archival Conservation Inc. (FSR, South Surrey, BC) have carried out many conservation assessments of small to medium-sized historical institutions over the past 20 years. Assessments have covered a range of institutions including archives, historic museums, exhibition centers and art museums. Although some of these assessments were in Canada, the most comprehensive have been completed under the auspices of the Conservation Assessment Program of Heritage Preservation in the United States.

Conservators Sarah Spafford-Ricci and Tara L. Fraser have devised a workable process for completing conservation assessments. Prior to the on-site visit, the museum staff complete a general questionnaire documenting the basic parameters of the institution, and forward specific museum documents to the conservators for analysis. Upon arrival, the conservators conduct interviews with pertinent staff. Over a two day period, the assessors survey the policies and procedures, characteristics of the facility, agents of deterioration, physical security, housekeeping, disaster preparedness, collections care policy, and the procedures for treatment, storage, exhibit and use of the collection. Forms are used to record the information. A randomsample collection survey is carried out to note the general condition by object category and state of care, and to uncover evidence of deleterious museum conditions. Before leaving, an exit interview is carried out. A final report is prepared which documents the institution's conservation status, analyzes it relative to best practices and procedures, and recommends improvements by priority.

FSR has routinely encountered issues that go beyond the obvious—but easily remedied—problems such as high light levels. The most far-reaching of these can be traced to deficiencies in collections staffing, training, funding, policies and procedures. Conservators have repeatedly found that museums require a foundation of strong collections management to support preservation activities. Collecting policies impact greatly on a museum's ability to conserve objects and FSR has found that museums with the best conservation practices are often those with a tight collecting mandate. Not surprisingly, most museums lack paid positions and dedicated funds for collections care. Surprisingly, the conservators have analyzed institutions whose Statement of Purpose either does not support, or actually undermines, preservation.

In many, preservation is not supported by other museum policies. Preservation activities are often ignored due to a lack of policies and written procedures, and confusion between the two. Major functional areas such as security and exhibits preparation are often covered adhoc without benefit of job description or written procedures. Generally speaking, most institutions assessed do not adequately separate collection and non-collection areas. And in many cases, collections care is compromised either by small non-public collection spaces (e.g. not enough storage room), or alternatively, not enough space designated to public non-collection spaces (e.g. public programming space). Storage and display techniques and materials are often lacking, the problem originating in lack of specific knowledge about collections care.

Sunday May 31, 2009

1:30-2:00PM

Preserving the Jasper Totem, A Case Study: Finding the Balance

Rick Lair*, Parks Canada, Winnipeg, M**B**, Canada James Hay, Canadian Conservation Institute, Ottawa, ON, Canada

At some time before 1884, Haida carvers created a magnificent 65 foot tall red cedar totem at a village site near Masset on the Queen Charlotte Islands. If the raging smallpox epidemic and active repression of traditional culture in the late 19th century had not occurred, and the totem had not been taken from the village by the railway company around 1913, the totem would have gradually rotted at is base and eventually blown down in a wind storm. Against all probabilities this totem has survived into the 21st century and now stands in Jasper National Park.

The year 2007 marked the 100th anniversary of Jasper National Park. For 87 of these years, the Haida "Raven Totem" has stood sentinel to visitors arriving at the Canadian National Railway station at Jasper. It has become a dominant feature of the Jasper townsite cultural landscape. A transfer of "ownership" of the totem from the Canadian National Railway to Parks Canada in 2000 was recognized by the Haida to be an opportunity to become involved in the process of giving the Jasper Raven Totem appropriate attention. Questions of who has rights to the totem and its apparent deteriorating condition and very non-traditional paint treatment warranted attention. Enquiries to Parks Canada (the new stewards of the totem), set a needed preservation process in motion. Although condition inspections and emergency repairs to the totem as early as 2003, had revealed serious structural problems with the totem, Parks managers deferred initiating any major treatment or restorative work until the parks centennial celebrations were complete.

In June of 2008 wood conservators James Hay and Rick Lair traveled to Jasper to conduct a detailed condition assessment of the Raven Totem. The assessment revealed the indisputable reality that the totem must be lowered to prevent it from gradual shedding of its deteriorating carved elements or possible catastrophic felling in high winds. In a meeting with the Jasper Parks Canada managers and the conservators, the decision was made that the totem must be lowered to prevent further deterioration or total loss. This decision then leads to discussions regarding the future handling and treatment of the totem. It was then decided that due to its rarity, value, associated values, and condition, that even if it did receive restorative treatment it should not be reinstalled in the outdoor environment at Jasper.

There were no Haida representatives at the meeting although those present advocated the entitlement of the Haida to play a major role in the process.

This paper will chronicle the unique history of this totem and most importantly, the complexities of development of further plans for the handling, appropriate treatment and presentation of this valuable cultural icon.

The role of the conservation professional in this process is challenging! Developing an understanding of the evolving mutual recognition, acceptance and respect for cultural values held by both Aboriginal and Eurocentric cultures is essential to finding the eloquent and often elusive solutions we strive for.

Sunday May 31, 2009

2:00-2:30PM

The Potential of the IML Resistograph for Measuring the Condition of Large Wooden Objects

David Grattan*, Canadian Conservation Institute, Ottawa, ON, Canada Andrew Todd, AT Conservators Ltd, Bowen Island, BC, Canada

We have for many years been interested in finding improved ways of establishing the structural condition of large wooden objects such as Totem poles or wooden structures. The IML Resistograph is a fairly simple tool which holds great promise for addressing many of the questions about structural condition. The tool uses drilling resistance as the measuring method. Detailed information about the inside can be determined in this way and the Resistograph can locate internal defects which often can not be seen from the outside. CCI acquired a unit for testing in 2007 and we have been engaged in a field trial of the instrument over the last year or so. Several types of Totem Poles have been tested in several locations in British Columbia, and as a result we have developed some facility in the use of the instrument. The presentation will demonstrate some of the results and will pay attention to some of the defects we have been able to detect.

Sunday May 31, 2009

2:30-3:00PM

Playground of the Gods: A Totem Pole Conservation Project

Nadine Power*, Coquitlam, BC, Canada Andrew Todd, AT Conservators Ltd, Bowen Island, BC, Canada

This paper will discuss in detail the examination, treatment and logistics of the Burnaby Mountain Totem Pole Sculpture "Playground of the Gods." The project was undertaken by Andrew Todd Conservators Inc., under the instruction of Conservator Liz Czerwinski at the Burnaby Museum. Before the project began, conservators examined the poles using visual and analytical methods to determine the degree of decay and develop a proposal for treatment. During the two years that followed, the poles were cleaned to remove fungal and moss growth, sealed to prevent moisture and insect decay, and given structural improvements to reduce the risk of further damage. In-situ project management and safety issues when working at heights will also be considered. Through an outline of the analytical methods used, as well as conclusions formed through post-treatment assessment, the paper aims to contribute to the discussion of outdoor wooden sculpture conservation.

Micro-fading:

A New Tool for Analyzing Historical Artifacts and Predicting Longevity

Judith Bannerman and Jennifer Poulin, Canadian Conservation Institute, Ottawa, ON, Canada

Micro-fade testing is a new technique which can be applied to various historical artifacts in order to determine the fade rate of the object over time. A range of objects were chosen including porcupine quill decorated aboriginal artifacts, black and white collodion and gel photographs from the early 1900's, oil paintings, Japanese tissue papers and textiles, to be analyzed in the micro-fade tester. The data generated was then used in the CCI Fade Rate Calculator in order to predict fade rates for each specific object. As many of the artifacts are fragile, micro-fade testing has an advantage over many traditional methods of analysis as it can be done in situ with each colour area having the potential for several data sets to be collected without causing damage to the overall object.

The micro-fade tester is a machine that can perform accelerated light-aging tests, rapidly, non-destructively and can be used directly on the artifact. The device works as a reflectance spectrophotometer using a very intense probe beam with achromat lenses to produce a direct beam of 0.3mm in diameter and a diode-array collector. The light below 400nm and above 700nm is eliminated using filters as this is the range which is not present in a museum environment. The reflectance of the beam is collected as CIE L*a*b* and Delta E values to create continuous, real-time colour measurements which monitor fading in fugitive colours. The light intensities and colour spectrum of the reflected light is collected as a Delta E measurement and compared to the Blue Wool standard scale #1, #2, #3 and #4 in order to generate comparative fade rates. Each sample area is tested 5-10 times; each sample set exposed for 10 minutes and the resulting data is collected every 30 seconds.

Once the level of fade for each object is determined the data can be used in the CCI Fade Rate Calculator to determine, under specific lighting conditions, what could happen to the various colours over time. The fade rate calculator is based on the original slide rule light damage determination which is widely used in many fields.

Micro-fade testing in conjunction with the fade rate calculator is a new, ground breaking tool to aid conservators in creating display regimes, light level limits and display limits based on the data collected concerning specific fade rates for fugitive dyes. The application of the CCCI Light Damage Calculator can then predict after 100 years of light exposure and under specific museum conditions, what will happen to those fugitive colours. With further study it is hoped that a portable version of the micro-fade tester can be developed and used directly on objects in the

museum to contribute to our knowledge of how objects fade and how to preserve them for the future.

Cold Gelatine Adhesive

Vanessa Charles and Erica Kotze The Book & Paper Conservation Studio, University of Dundee, Dundee, Scotland

This poster describes an approach to the repair of iron gall ink documents, which was developed between 2003 and 2007 during the Linnean Correspondence Project. The project involved the preservation of almost 4000 letters, mostly written in iron gall ink, and provided an impetus for the reassessment of the adhesives used at our studio on this type of material.

Current research indicates that the adhesives chosen by conservators to repair papers with iron gall ink can have either positive or deleterious effects on this medium. It is well understood that local use of water-based adhesives is potentially harmful to untreated inks, as the moisture can catalyse iron gall ink corrosion. However, certain gelatines have been shown to be capable of enclosing iron ions under certain conditions, and have been used for resizing and repair. For use on ink corroded manuscripts, a Type B, Food Grade gelatine with a high or medium Bloom degree (>200g) is recommended. As a result, type B gelatine was selected for use where repairs were in contact with inks on the Linnean Correspondence. The letters received no other treatment apart from cleaning and re-housing.

Traditionally gelatine adhesive is used warm and in a liquid state for repair treatments. However this can be problematic due to its working properties: as a liquid as it is readily absorbed by the substrate, it initially lacks tack and necessitates the use of some form of device to warm the adhesive in order to prevent it from setting. To counter these problems, we developed a technique using cold gelatine. By repeatedly pushing cold gelatine through a horse hair sieve an adhesive with good working properties is achieved. It comprises of a very fine granular gel that can be further broken down to a film when brushed onto a repair paper during use.

The poster describes the methods currently being employed by the Book & Paper Conservation Studio, University of Dundee. The information is intended for assessment and application by qualified paper and book conservators.

Pencil to Keyboard: Where do you fit in?

Cindy Colford, Collection Conservation & Management Class (2008/2009), Fleming College, Peterborough, ON, Canada

According to the CAC Code of Ethics, documentation is a necessary and important step in conservation. Recording and maintaining detailed information on objects allows conservation professionals to spot changes or damage to objects that may have occurred over time.

The 2007/2008 Collections Conservation & Management class at Fleming College devised and issued an electronic survey, using Survey Monkey, which was subsequently reissued by the 2008/2009 class. These surveys were conducted to gain a better understanding of which documentation methods are preferred. For the two surveys, students selected a cross section of conservators, from head conservators at public institutions to private practitioners, representing all geographic regions in Canada. Forty-one (50%) of the conservators contacted responded.

The survey results indicate that, though conservators across the country agree on the importance of documentation, a lack of standardization exists. Some conservators rely more heavily on digital documentation—both written and photographic—while others continue to utilize handwritten forms and film-based photography. The information that is documented is not standardized though a number of common categories are recorded.

In an age of increasing connectivity and reduced budgets, it is becoming more important for conservators to be able to share knowledge easily and efficiently. By placing the results of this survey in an easily accessible poster form, conservators will be able to: see the types of documentation used by their peers, provide the conservation community an excellent platform for more discussion on this topic, and contribute to the growth of standardization in conservation documentation.

Weaving the Past into the Present:

The Sustainability of Traditional Culture in a Modern Context

Sarah Confer, Vancouver, BC, Canada

Traditional knowledge is an unparalleled resource for understanding our physical and social environment, presenting a holistic view of the natural world and our place in it. Throughout history, this knowledge was frequently transmitted through the material culture of a community. Such cultural expression is fundamental to human experience, establishing both a communal cultural identity and also defining our individual identities, something which is essential to our physical and mental well-being as well as to the creation of healthy communities.

The physical record of this material culture, and the traditional knowledge it represents, clearly merit preservation, a task historically accomplished by such institutions as history and ethnographic museums. We are very familiar with the concept of the preservation of historical objects, but what about the preservation of a living culture, experienced through the continued production of traditional craft?

In many indigenous communities, people are fighting for cultural survival amidst an everchanging and encroaching modernity. The sustainability of traditional culture and traditional craft in a modern context is a challenging task, but returning agency to indigenous communities to maintain the integrity of their cultural identity, marking its relevancy in contemporary society, ensures its continuity into the future. In indigenous communities in Peru, weaving remains a remarkable agent for the creation of identity and is an unparalleled cultural signifier and form of communication. Fear for the degradation of this tradition and the gradual loss of traditional knowledge prompted the formation of groups such as the Centre for Traditional Textiles of Cusco and Project Mosqoy, which both work to revitalise these traditions by supporting weavers and weaving cooperatives, as well as through educational programmes and exhibitions. In this way, cultural identity is maintained, and communities and traditions strengthened, in a way that is sustainable and relevant in a modern context.

Sustainable Preventive Conservation at the Natural History Museum, London

Gill Comerford, Natural History Museum, London, UK

In the 1970's, human remains of more than 1100 individuals were excavated from a former Romano-British cemetery (approx 135 AD to 350 AD) close to the current village of Poundbury in Dorset. The collection, which is now held in its entirety at the Natural History Museum, represents one of the most heavily used study collections in the Palaeontology Department. The collection is almost continually in use by visiting researchers. The poor storage of the collection coupled with its heavy use has led to its current condition; eventually this could lead to its inaccessibility. In line with the preventive conservation strategy led by the Palaeontology Conservation Unit a project has been set up which aims to evaluate the current storage conditions, to re-house the material in recycled conservation grade boxes, provide all elements with bespoke supports, prevent abrasion and reduce the necessity to handle the collection through better labelling. A team of specially trained volunteers has been developed to support the project.

New Mannequin Design for Fragile & Hard-to-Handle Parkas

Mair La Touche, Benchmark, Rosemont, NJ, USA

"New Mannequin Design for Fragile & Hard-to-Handle Parkas" details the construction of mannequins for hooded parkas from the Smithsonian's National Museum of Natural History (NMNH) and the National Museum of the American Indian (NMAI). These beautiful garments are an important part of the over 500 objects selected from the two museums for long-term loan to the NMNH Alaska Arctic Studies Center. "Living our Cultures", the Arctic Center's inaugural exhibit, is scheduled to open in a new wing of the Anchorage Museum in 2010.

Those objects going to the Center are expected to be taken out of the cases periodically for study, so one of the core requirements in the exhibit is satisfying this expectation of a high level of access to the collection by Alaskan Native populations. Part of the challenge to conservators and mount makers was to balance access to the objects with their safety and longterm preservation.

In the instance of the mannequins, there were 4 requirements: easy removal from the cases, a certain facility in handling and moving the artifact when on the mannequin, the ability to dress and undress the mannequin with a minimum of handling to the object, and a visual effect that was somewhere between a realistic body and the fuller support that would be best for a garment on long-term display. The parkas—of gut, caribou, squirrel skins & auk hides—are fragile and cannot take vigorous handling. Nor do they open up in the front, as so many clothes do, which would allow for easier dressing and undressing. And they all have hoods, which needed to be supported as well.

The ultimate solution is built around a three-part design that was used with variations for all five garments. First, there is an Ethafoam "noodle" that supports the sleeves in one continuous arc. That piece has a slot in it that fits onto a "handle" fitted into the top of the mannequins' Ethafoam torso. With the fitting of the arm-piece over the handle, the two parts are locked together. The third piece in the design is a "headband" that pegs into the arm-piece. It is this last piece that holds the hood up.

The advantage of this design is the ease of manufacture, the ease of dressing and undressing, and the additional advantage of being able to use the "noodle" as you would a hanger with which to carry and handle the parka, or alternately, using the "handle" to carry or move the mannequin all in one piece, with minimal touching of the garment itself. I usually make mannequins that are realistic bodies carved from Ethafoam. I knew that was not the answer for these pieces. The solution that was hammered out— through a bit of trial and error—is one I am very pleased with because I know they were relatively easy to make, unlike the carved bodies. The ease of handling is a real and a pleasant surprise, evident to both me and the conservators every time we have to dress or undress one of these remarkable artifacts.

Removal of Corrosion Products from the Surface of Archaeological Rubber

Jessica Lafrancs, Conservator (Intern), Archaeology, CCI, Ottawa, ON, Canada

Several rubber shoes and clothing fragments arrived at CCI as part of a larger group of finds from the Old Songhees Reserve site, Victoria, BC. These rubber objects had been found within the remnants of a metal cistern along with other personal items. The objects were wet, disfigured, and the surfaces were covered with corrosion of varying thicknesses on one or both sides. Several of the objects were made of laminates of vulcanized rubber, specifically a thin beige textured layer of rubber and a thicker black rubber. The light rubber had been delaminating from the black rubber, and could not withstand mechanical cleaning. Chemical cleaning was appropriate for the lighter rubber but could not be uniformly applied to the black rubber as it had localized areas of oxidized soft and sticky patches.

Literature describing past treatments recommended mechanical cleaning, as well as the use of Hydrogen Peroxide to soften corrosion products, and immersion in Ammonium Citrate to remove corrosion products and staining. Due to the composite nature of the rubber, and varied levels of degradation that could be found on one object, the mechanical cleaning was restricted, and a more controlled method of chemical application had to be found.

This poster will describe the results of this work to remove corrosion products and stains from the surface of archaeological rubber using the following:

- Locally applied hydrogen peroxide combined with mechanical cleaning,
- Ammonium citrate soaked blotting paper held in contact with the rubber surface,
- Ammonium citrate combined with carboxymethylcellulose applied locally.

A Rehousing Strategy for Archival Records

Shelagh Linklater, Provincial Archives of Manitoba, Winnipeg, MB, Canada

Collections can be put at risk because of inadequate storage furniture and deteriorated enclosures. To carry out a re-housing project, both the records and their enclosures must be examined and ranked according to general condition, size, chemical stability and physical strength. A strategy involving surveys, a set of criteria and a database to analyze these statistics develops work proposals to estimate cost and time.

The survey criteria encompass many levels. Housing problems are narrowed down to two major categories: protective enclosures and furniture. Furniture such as shelves and map drawers are analyzed for their size appropriateness for the records they supported. Boxes and enclosures are evaluated for their chemical stability, physical soundness and size suitability for the records they hold. Each enclosure is ranked according to the quantity of problems observed. The collections are examined and sorted according to dimension and condition. Size classifications are based on commercial enclosures. Record condition is defined by both chemical and physical stability.

These findings are recorded in a database with rehousing set as the main action with treatment to follow. The resulting analysis is used for arranging priorities and estimating costs and time for stabilization and treatment.

Variations on A Rolled Theme: Support Alternatives for Rolled Storage

Shelagh Linklater, Provincial Archives of Manitoba, Winnipeg, MB, Canada

Rolled storage is an option for maps and plans that surpass the dimensions of commercial storage furniture. This poster discusses some alternate support systems for rolled storage using recycled shelving and art screens. Adjustable library shelving, for example, provide the main base for one support method. Two length of chain are suspended from the top of the main columns. Dowels are inserted within rolled maps then suspended horizontally between the two chains. Art storage screens traditionally used for hanging framed works are modified to hold rolled records. Recesses in the screens are padded with wood and Corex. Dowels suspended from S-hooks are then attached to the pullout screens. These innovations can make use of available space and resources while safely supporting over-size records. They can save both money and space.

Cleaning Grueby Tile Mosaics and Sustainable Conservation

Sarah Nunberg, Brooklyn, NY, USA

Eleven central wall panels (each approximately 2 feet high by 6 feet long) and twelve side panels (each approximately 2 feet high by 8 inches wide) were cleaned before they were moved to storage and then to their new exhibition location in the renovated el Museo del Barrio. In this treatment an attempt was made to use minimal toxic chemicals and to produce minimal waste.

The pavements set in three walls of the lobby of the Heckscher Foundation for Children built in 1923, were designed and made by the Grueby Faience Company and were part of the original construction. Each mosaic depicts a different scene of children playing.

The tiles are made of coarse-tempered, high-fired ceramic paste. The glazes, typical Grueby, ranged from high-gloss black to matt blue-black, a range of low-gloss yellows, orange, light blues, pink, and white. All glazes and fired surfaces are stable and in good condition except for the black dirt and grime that covered the tiles and made the white grout black, significantly altering the pavement appearance. In archival photos dating from the time of installation, the grout is bright white.

Because the tile surfaces are stable, high fired and glazed, they could be cleaned with nylon brushes, bristle brushes and steam. Methyl cellulose poultices of hydrogen peroxide with ammonia, removed with steam, brushes and sponges cleaned most grime and dirt. More tenacious dirt was removed with a focused stream of steam that dissolved and blew off soil and grime, leaving surfaces nearly dirt-free, without damaging the glaze.

Using steam allowed for the minimal use of water and enhanced the solvent cleaning power, reducing the amount and strength of solvents required to remove the dirt and grime. Only in the last cleaning phase was acetone on cotton wool combined with steam used selectively to clean small areas that remained discolored from dirt. Instead of using large amounts of cotton wool or paper towels, reusable bristle and nylon brushes and sponges were used for most surface cleaning.

The client for this project was the New York City Department of Design and Construction. The cleaning scope was developed and implemented by Sarah Nunberg in association with Evergreen Painting Studios, Inc., the contractor for conservation and salvage of the tiles.

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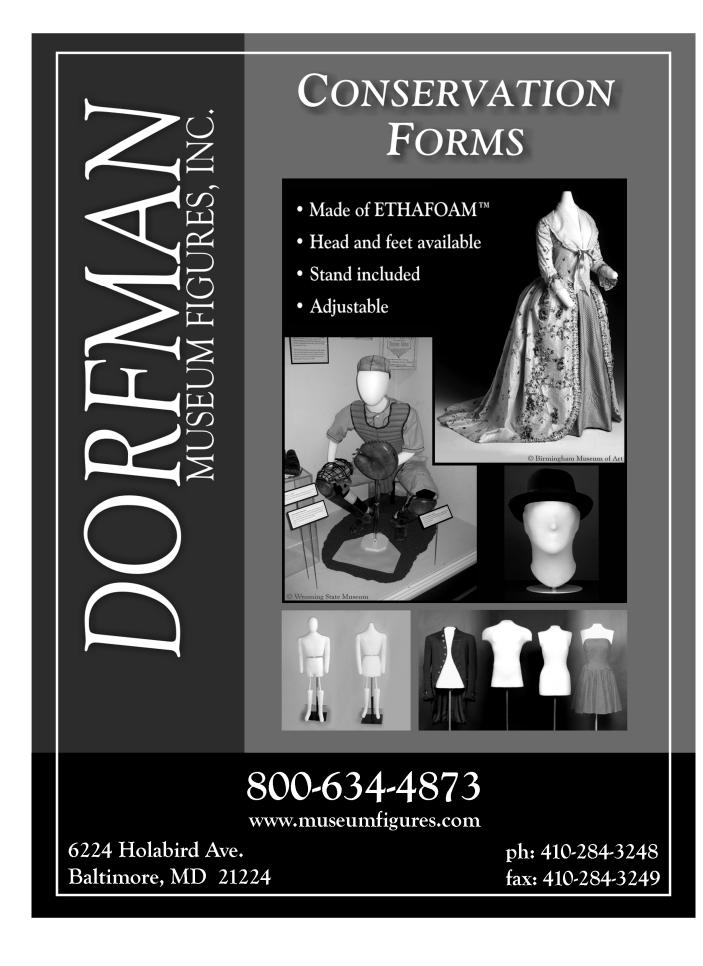
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